

Sustainable Food Menu Item Lesson Plan

SUBJECTS: Technology and Enterprise

TIME: 6 sessions @ 50 minutes

GRADE LEVEL: Grades 9-10

PURPOSE:

During this lesson students will learn about: the importance of using local foods in season, organic foods, how foods can be produced, packaged and transported in a way that takes into account sustainability.

BACKGROUND:

Students are incorporating the knowledge they have learnt in the previous lessons in this unit of study. They have gained an overview of sustainable foods and additives. Now they draw on this learning to create a sustainable menu item for the new restaurant.

OBJECTIVES:

Students will be able to

1. Understand food materials and give consideration to their role in society
2. Understanding food and environmental impacts
3. Develop food to meet specific requirements taking into consideration society and the environment

PRE-ASSESSMENT:

Students are aware of menu planning principles. The five basic menu-planning principles are:

1. Strive for balance.
2. Emphasize variety.
3. Add contrast.
4. Think about colour.
5. Consider eye appeal.

Students are familiar with the concept mapping software called Compendium.

SET INDUCTION:

Explain to the student's that Neil Perry has called upon them to assist in creating a sustainable food menu for the Perth Rockpool Bar & Grill restaurant. He is also seeking ideas to incorporate in the menu planning to reduce the environmental impact. Each group's menu items will be saved by the restaurant and added to the appropriate seasonal menu. The restaurant has four menus, a spring, summer, autumn and winter menu.

PROCEDURE:

Display the brainstorming exercise on sustainable foods as revision. Conduct another quick brainstorming exercise to revise material learnt during the additives lesson.

The teacher continues the lesson by referencing and discussing the "Menu Item" brief for this lesson. Can utilise the IWB for this step by bringing up the website www.sustainablefood.weebly.com.

Refer students to the assessment matrix also to clarify expectations.

INTRODUCTION:

The opening of Neil Perry's Rockpool Bar & Grill in February at Burswood will see one of the country's top dining destinations. Neil's philosophy is "Keep it fresh, keep it simple".

"I am hoping there will be plenty of people who are really interested in the quality of the ingredients that they eat and where their food comes from and the beautiful simple cooking that we do," he said when discussing the planned opening of his Perth restaurant.

(WAtoday.com.au, July 15, 2010)

Neil Perry has an environmental conscience; the cornerstone of the menu is a sustainable philosophy using the finest and freshest produce from Australia's most reputable suppliers.

MENU ITEM BRIEF:

Background to the project

In recent years we have come to expect more and more from the food we buy. Today we can buy almost anything, pre-packed and ready to use, at any time of the year. To meet this demand for convenience, farmers have turned to large-scale, energy-intensive farming; pesticides and fertilisers are widely used; and the amount of food packaging has increased enormously. All of these changes have had a major effect on the environment.

Overview of Brief

Your group should use the concept-mapping tool called Compendium <http://compendium.open.ac.uk/institute/> (or similar) to plan your menu item. This will be the central repository for your work.

Design and make a menu item that will encourage consumption of organic produce and or foods that are in season.

Specify which seasonal menu your menu item will feature on.

Your menu item should:

Be made from locally available foods in season (which maybe organic)

Consider using ingredients with minimal packaging

Source ingredients transported in a way that causes as little harm as possible to the environment.

Think about sustainability when evaluating your menu item.

You will be given class time to conduct online research using the Internet. You will find ample resources on the Resources Page of the Sustainable Food website.

A. Menu Item Recipe

Create a recipe or rehash an existing recipe with your own special flair added.

Give it a name.

List the quantity and ingredients, together with the steps to make the menu item under a section called method.

Specify the serving size.

A digital photograph illustrating the completed menu item should be presented (obtain once cooked).

Use Ms Word (or similar) to save the final copy of your work. You should also create an entry with an appropriate title (menu item title and your group identification) to the class blog under the category "Rockpool menu".

B. Menu Item Suppliers/Source of Ingredients

Working within Compendium, list the suppliers (where possible) for the ingredients used.

Include the website of the supplier if available.

Include an explanation of why it should be included - why it is nutritionally superior (for example, no hormones, antibiotics, additives, health benefits)

Save your final list of suppliers to the original Ms Word (or similar) created during stage A.

C. Menu Item Costing

Provide an estimated costing of the menu item for one serve. Use the spreadsheet provided at this site:

http://www.curriculumsupport.education.nsw.gov.au/secondary/technology/7_10/technology/teaching_ideas/finance_lit/finance_lit.htm.

Cost one version using sustainable food ingredients and another version of the recipe using non-sustainable organic products. Which is more expensive and why?

You should be able to drag the costing spreadsheet from your computer, which you downloaded from the above site. Remember to save the final costing within your Compendium file.

Add a total of the menu costing for both recipes to the original MS word file created in stage A.

D. Food Miles

Calculate the food miles for both versions of the recipe. Which version of the recipe is better for the environment? You can use the following website or another of your choice : http://lifecyclesproject.ca/initiatives/food_miles/calculating_food_miles.php

Remember to save the food mile calculations within your Compendium file. Add a summary of the food miles for both recipes to the original MS word file created in stage A.

E. Cooking Demonstration

Give a demonstration on it being made & the final presentation for the diner. Ensure you take a final digital photograph and add this to your recipe created at stage A.

Give particular attention to the following practical preparation and service:

- Demonstrate safe and hygienic work practices when using equipment and appliances.
- Demonstrate safe food handling practices to control reactions between ingredients and equipment to achieve performance requirements e.g. cross contamination, food storage.
- Demonstrate safe use and storage of equipment.
- Demonstrate safe workplace procedures and food handling practices for health and safety.
- Demonstrate teamwork skills.
- Display efficient time management skills.
- Evaluate the menu item
- Have peers evaluate your menu item. (You will be evaluating other groups menu item also).

Complete part one of the worksheet for this lesson - Evaluating of the production process.

F. Conduct a Blind Tasting (immediately after demonstration)

Conduct a tasting of both versions of the menu item. Ask three people to select which is the superior dish. Do not reveal to the taster the sustainable food dish until the tasting has been completed. Provide brief analyses of the results and any comments made by the tasters. What does this reveal about your item?

Ensure you add the results to the original MS word file created in stage A under an appropriate heading.

Complete part two and three of the worksheet for this lesson-Tasting of produced dish and group/product evaluation.

G. Minimizing Waste

Include ideas on how waste can be minimized in preparing the menu. Ensure you add this to the original MS word file created in stage A under an appropriate heading. You only need to keep this brief approximately (100-150 words) or you may choose to demonstrate this in another manner, in which case keep it brief.

EXTENSION:

You may elect to record the cooking demonstration and upload the movie to the class blog if you have time. (Students can use iMovie or another technology they are familiar with).

CLOSURE:

Conduct a class discussion to share what students found interesting in this topic. Ask questions like: "What was to most interesting/surprising fact they revealed?" "What have you changed to date that will make a difference in terms of sustainable food and the economy/environment?" Have the students reflect on their learning about the topic in their e-portfolio. Students should critique their overall performance and discuss what went well and what would they do differently.

Request constructive feedback as to what they would like changed about the topic, what areas did they particularly enjoy or otherwise?

Ask],[they would have done differently whilst undertaking this lesson.

MATERIALS NEEDED:

- Computers with Internet access
- MS Office Suite
- Compendium Software
- Costing spreadsheet from website:
http://www.curriculumsupport.education.nsw.gov.au/secondary/technology/7_10/technology/teaching_ideas/finance_lit/finance_lit.htm.
- Food miles calculator:
http://lifecyclesproject.ca/initiatives/food_miles/calculating_food_miles.php
- Digital camera
- Food ingredients and cooking equipment (food laboratory)
- iMovie or other software to record food demonstration and upload to blog
- E-portfolio
- Worksheet for this lesson

EVALUATION:

See Assessment Matrix included on the Teachers Page of www.sustainablefood.weebly.com